

|  |                                     |  |  |
|--|-------------------------------------|--|--|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><br><small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>  |                                     | Attorney Docket No. 132281   |  |
|  |                                     | First Inventor Stephen John Howell   |  |
|  |                                     | Title  | Methods and Apparatus for Cooling Turbine Engine Combustor Exit Temperatures |
|  |                                     | Express Mail Label No. EV298648720US   |  |
| <b>APPLICATION ELEMENTS</b><br><small>See MPEP chapter 600 concerning utility patent application contents.</small>   |                                     | <b>ADDRESS TO:</b><br>Mail Stop Patent Application<br>Commissioner for Patents<br>PO Box 1450<br>Alexandria, VA 22313-1450   |  |
|  |                                     |  |  |
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g. PTO/SB/17)<br><small>(Submit an original and a duplicate for fee processing.)</small><br>2. <input type="checkbox"/> Applicant claims small entity status.<br><small>See 37 CFR 1.27.</small><br>3. <input checked="" type="checkbox"/> Specification [Total Pages 16]<br><small>(preferred arrangement set forth below)</small><br>- Descriptive title of the invention<br>- Cross Reference to Related Applications<br>- Statement Regarding Fed sponsored R & D<br>- Reference to sequence listing, a table,<br>or a computer program listing appendix<br>- Background of the Invention<br>- Brief Summary of the Invention<br>- Brief Description of the Drawings (if filed)<br>- Detailed Description<br>- Claim(s)<br>- Abstract of the Disclosure<br>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 4]<br>5. Declaration & Power of Attorney [Total Pages 4]<br>a. <input checked="" type="checkbox"/> Newly executed (original or copy)<br>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d))<br><small>(for continuation/divisional with Box 17 completed)</small><br>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br><small>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</small><br>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 |                                     | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)<br>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)<br>a. <input type="checkbox"/> Computer Readable Form (CRF)<br>b. Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br>ii. <input type="checkbox"/> paper<br>c. <input type="checkbox"/> Statements verifying identify of above copies |  |
| <b>ACCOMPANYING APPLICATION PARTS</b>  |                                     |  |  |
| 9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s)) [5 pages]<br>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney<br><small>(when there is an assignee)</small><br>11. <input type="checkbox"/> English Translation Document (if applicable)<br>12. <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Copies of IDS Citations<br><small>(IDS)/PTO-1449</small><br>13. <input type="checkbox"/> Preliminary Amendment<br>14. <input checked="" type="checkbox"/> Return Postcard (MPEP 503) (Should be specifically itemized)<br>15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br><small>(if foreign priority is claimed)</small><br>16. <input type="checkbox"/> Non Publication Request under 35 U.S.C. 122<br><small>(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</small><br>17. <input checked="" type="checkbox"/> Other: _____   |                                     |  |  |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:<br><input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP)    of prior application No.: _____<br><small>Prior application information: Examiner _____ Group Art Unit: _____</small><br><b>For CONTINUATION OR DIVISIONAL APPS only:</b> The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts.  |                                     |  |  |
| <b>19. CORRESPONDENCE ADDRESS</b>  |                                     |  |  |
| <input type="checkbox"/> Customer Number or Bar Code Label   |                                     | 29399<br><small>(Insert Customer No. or Attach bar code label here)</small>  |  |
|  |                                     | or <input checked="" type="checkbox"/> Correspondence address below  |  |
| Name   | John S. Beulick                     |  |  |
| Address  | Armstrong Teasdale LLP              |  |  |
|  | One Metropolitan Square, Suite 2600 |  |  |
| City   | St. Louis                           | State  | MO   |
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|  |                                     | Fax  | 314.621.5065   |
| Name (Print/Type)  | Robert B. Reeser, III               |  | Registration No. (Attorney/Agent)  |
|  |                                     |  | 45,548   |
| Signature  |                                     |  | Date   |
|  |                                     |  | October 17, 2003   |
| <b>Certificate of Express Mail</b>   |                                     |  |  |
| I certify that the documents listed on this form are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.   |                                     |  |  |
| Robert B. Reeser, III  |                                     | October 17, 2003   |  |
| (Printed Name of Person Mailing Correspondence)  |                                     | (Signature of Person Mailing Correspondence)   |  |
|  |                                     | Date   |  |

 22388 U.S. PTO  
10/687683

101703

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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 810.00

**Complete if Known**

|                      |                     |
|----------------------|---------------------|
| Application Number   |                     |
| Filing Date          | October 17, 2003    |
| First Named Inventor | Stephen John Howell |
| Examiner Name        |                     |
| Art Unit             |                     |
| Attorney Docket No.  | 132281              |

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

01-2384

Armstrong Teasdale LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid     |
|--------------|----------|--------------|----------|------------------------|--------------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |              |
| 1001         | 770      | 2001         | 385      | Utility filing fee     | 770.00       |
| 1002         | 340      | 2002         | 170      | Design filing fee      |              |
| 1003         | 530      | 2003         | 265      | Plant filing fee       |              |
| 1004         | 770      | 2004         | 385      | Reissue filing fee     |              |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |              |
| SUBTOTAL (1) |          |              |          |                        | (\$ ) 770.00 |

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

|                    |  |              |  |                |  |          |  |
|--------------------|--|--------------|--|----------------|--|----------|--|
| Total Claims       |  | Extra Claims |  | Fee from below |  | Fee Paid |  |
| Independent Claims |  | -20** =      |  | X              |  |          |  |
| Multiple Dependent |  | -3** =       |  | X              |  |          |  |

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |          |
| 1201         | 86       | 2201         | 43       | Independent claims in excess of 3                          |          |
| 1203         | 290      | 2203         | 145      | Multiple dependent claim, if not paid                      |          |
| 1204         | 86       | 2204         | 43       | ** Reissue independent claims over original patent         |          |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |          |
| SUBTOTAL (2) |          |              |          |  | (\$ )    |

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description  | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051     | 130      | 2051     | 65       | Surcharge - late filing fee or oath  |          |
| 1052     | 50       | 2052     | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053     | 130      | 1053     | 130      | Non-English specification  |          |
| 1812     | 2,520    | 1812     | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804     | 920*     | 1804     | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805     | 1,840*   | 1805     | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251     | 110      | 2251     | 55       | Extension for reply within first month                                     |          |
| 1252     | 420      | 2252     | 210      | Extension for reply within second month                                    |          |
| 1253     | 950      | 2253     | 475      | Extension for reply within third month                                     |          |
| 1254     | 1,480    | 2254     | 740      | Extension for reply within fourth month                                    |          |
| 1255     | 2,010    | 2255     | 1,005    | Extension for reply within fifth month                                     |          |
| 1401     | 330      | 2401     | 165      | Notice of Appeal   |          |
| 1402     | 330      | 2402     | 165      | Filing a brief in support of an appeal                                     |          |
| 1403     | 290      | 2403     | 145      | Request for oral hearing   |          |
| 1451     | 1,510    | 1451     | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452     | 110      | 2452     | 55       | Petition to revive - unavoidable   |          |
| 1453     | 1,330    | 2453     | 665      | Petition to revive - unintentional   |          |
| 1501     | 1,330    | 2501     | 665      | Utility issue fee (or reissue)   |          |
| 1502     | 480      | 2502     | 240      | Design issue fee   |          |
| 1503     | 640      | 2503     | 320      | Plant issue fee  |          |
| 1460     | 130      | 1460     | 130      | Petitions to the Commissioner  |          |
| 1807     | 50       | 1807     | 50       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806     | 180      | 1806     | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021     | 40       | 8021     | 40       | Recording each patent assignment per property (times number of properties) | 40.00    |
| 1809     | 770      | 2809     | 385      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810     | 770      | 2810     | 385      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801     | 770      | 2801     | 385      | Request for Continued Examination (RCE)                                    |          |
| 1802     | 900      | 1802     | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 40.00

**SUBMITTED BY**

(Complete if applicable)

|                   |                       |                                   |                  |           |              |
|-------------------|-----------------------|-----------------------------------|------------------|-----------|--------------|
| Name (Print/Type) | Robert B. Reeser, III | Registration No. (Attorney/Agent) | 45,548           | Telephone | 314/621-5070 |
| Signature         |                       | Date                              | October 17, 2003 |           |              |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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